namespace Multiplearraes

{

internal class Program

{

static void Main(string[] args)

{

var matrix = new char[][]

{

new char[] { 'F', 'A', 'C', 'I' },

new char[] { 'O', 'B', 'Q', 'P' },

new char[] { 'A', 'N', 'O', 'B' },

new char[] { 'M', 'A', 'S', 'S' }

};

Console.WriteLine(FindWord(matrix, "FOAM")); // Should return True

Console.WriteLine(FindWord(matrix, "MASS")); // Should return True

Console.WriteLine(FindWord(matrix, "FOB")); // Should return False

}

public static bool FindWord(char[][] matrix, string word)

{

// Check if the word can be found by going left-to-right.

foreach (var row in matrix)

{

if (string.Join("", row) == word)

{

return true;

}

}

// Check if the word can be found by going up-to-down.

for (int i = 0; i < matrix[0].Length; i++)

{

string column = "";

for (int j = 0; j < matrix.Length; j++)

{

column += matrix[j][i];

}

if (column == word)

{

return true;

}

}

return false;

}

}

}